WHAT IS CLAIMED IS:

1   1. A method comprising the steps of:

2   identifying a first display content to be displayed at a first time;

3   identifying a second display content to be displayed at a second time, wherein the second

4   time is after the first time;

5   providing display data to a display port at a first frame rate, when the first display content is

6   different from the second display content; and

7   providing display data to the display port at a second frame rate, when the first display

8   content is substantially the same as the second display content, wherein the second

9   frame rate is less than the first frame rate.

1   2. The method as in Claim 1, further including the steps of:

2   enabling a first clock rate, when the first display content is different from the second display

3   content; and

4   enabling a second clock rate, when the first display content is substantially the same as the

5   second display content, wherein the second clock rate is less than the first clock rate.

1   3. The method as in Claim 2, wherein the step of enabling the first clock rate includes:

2   providing a clock signal associated with an oscillator to a phase locked loop; and

3   providing a locked clock signal generated by the phase locked loop to a clock bus.

1   4. The method as in Claim 3, further wherein the step of enabling the second clock rate includes:

2   disabling the phase locked loop; and

3   providing the clock signal associated with the oscillator to the clock bus.

1   5. The method as in Claim 1, further including the steps of:

2   representing the display data using a first number of bits, when the first display content is

3   different from the second display content; and

4   representing the display data using a second number of bits, when the first display content is

5   substantially the same as the second display content, wherein the second number of

6   bits is less than the first number of bits.

1   6. The method as in Claim 5, wherein the number of bits is associated with a color depth.

1   7. The method as in Claim 1, further including the steps of:

2   activating a first number of interface lines associated with the display port, when the first

3   display content is different from the second display content; and

4   activating a second number of interface lines associated with the display port, when the first

5   display content is substantially the same as the second display content, wherein the

6   second number of control lines is less than the first number of control lines associated

7   with the display port.

1   8. The method as in Claim 7, wherein the interface lines include one of digital to analog converter

2   input lines, transition minimized differential signaling input lines, or low voltage differential

3   signaling input lines.

1   9. The method as in Claim 1, further including the steps of:

2   identifying a third display content to be displayed at a third time, wherein the third time is

3   after the second time;

4   providing display data with a first color depth, when the third display content is different

5   from the first display content; and

6   providing display data with a second color depth, when the third display content is

7   substantially the same as the first display content, when the second color depth is less

8   than the first color depth.

1   10. The method as in Claim 1, wherein the steps are performed within a portable device.

1   11. The method as in Claim 10, wherein the portable device includes a personal digital assistant.

1   12. The method as in Claim 1, wherein the display content is associated with a personal digital

2   assistant.

1   13. The method as in Claim 1, wherein the display data is for output on a display device.

1   14. The method as in Claim 13, wherein the display device includes a screen associated with a

2   personal digital assistant.

1   15. The method as in Claim 14, wherein the display device includes a liquid crystal display.

1   16. The method as in Claim 1, further including the steps of:

2   supporting a first nominal power, when the first display content is different from the second

3   display content; and

4   supporting a second nominal power, when the first display content is substantially the same

5   as the second display content, wherein the second nominal power is less than the first

6   nominal power.

1   17. The method as in Claim 1, wherein a number of bits used to represent multimedia data is

2   changed to match a change in nominal power.

1   18. The method as in Claim 17, wherein the multimedia data includes video data.

1   19. The method as in Claim 17, wherein the multimedia data includes audio data.

1   20. A method comprising the steps of:

2   identifying a first display content to be displayed at a first time;

3   identifying a second display content to be displayed at a second time, wherein the second

4   time is after the first time;

5   using a first number of bits to represent display data, when the first display content is

6   different from the second display content; and

7   using a second number of bits to represent display data, when the first display content is

8   substantially the same as the second display content, wherein the second frame rate is

9   less than the first frame rate.

1   21. The method as in Claim 20, wherein the number of bits used to represent data includes a color

2   depth.

1   22. The method as in Claim 20, wherein the display data is for display on a display device.

1   23. The method as in Claim 22, wherein the display device includes a personal digital assistant

2   screen.

1   24. The method as in Claim 20, further including the steps of:

2   enabling a first clock rate, when the first display content is different form the second display

3   content; and

4   enabling a second clock rate, when the first display content is substantially the same as the

5   second display content, wherein the second clock rate is less than the first clock rate.

1   25. The method as in Claim 24, wherein the step of enabling the first clock rate includes:

2   providing a clock signal associated with an oscillator to a phase locked loop; and

3   providing a locked clock signal generated by the phase locked loop to a clock bus.

1 26. The method as in Claim 25, further wherein the step of enabling the second clock rate includes:

2   disabling the phase locked loop; and

3   providing the clock signal associated with the oscillator to the clock bus.

1 27. The method as in Claim 20, further including the steps of:

2   supporting a first nominal power, when the first display content is different from the second

3   display content; and

4   supporting a second nominal power, when the first display content is substantially the same

5   as the second display content, wherein the second nominal power is less than the first

6   nominal power.

1 28. A system comprising:

2   a content analyzer to compare a first display content to be displayed at a first time with a

3   second display content to be displayed at a second time, wherein the second time is

4   after the first time;

5   a display module to alter a frame rate for providing display data to a display port, wherein

6   said frame rate is based on the comparison performed by said content analyzer; and

7   said display port to output said display data.

1 29. The system as in Claim 28, wherein said display module further used to:

2   apply a first frame rate for providing display data to said display port, when said content

3   analyzer determines the first display content is different from the second display

4   content; and

5   apply a second frame rate for providing display data to said display port, when said content

6   analyzer determines the first display content is substantially the same as the second

7   display content, wherein the second frame rate is less than the first frame rate.

1 30. The system as in Claim 28, wherein said first display content is stored in memory.

1 31. The system as in Claim 28, further including a power module, said power module to:

2   enable a first clock rate, when said content analyzer determines the first display content is

3   different from the second display content; and

4   enable a second clock rate, when said content analyzer determines the first display content is

5   substantially the same as the second display content, wherein said second clock rate

6   is less than said first clock rate.

1   32. The system as in Claim 28, further including a power module, said power module to:

2   support a first nominal power, when said content analyzer determines the first display

3   content is different from the second display content; and

4   support a second nominal power when said content analyzer determines the first display

5   content is substantially the same as the second display content, wherein said second

6   nominal power is less than said first nominal power.

1   33. The system as in Claim 28, wherein:

2   said content analyzer further used to compare a third display content to be displayed at a

3   third time with the first display content, wherein the third time is after the second

4   time; and

5   said display module further to:

6   provide display data with a first color depth, when the content analyzer

7   determines the third display content is different from the first display

8   content; and

9   provide display data with a second color depth, when the content analyzer

10   determines the third display content is substantially the same as the

11   first display content.

1   34. A system comprising:

2   a content analyzer to compare a first display content to be displayed at a first time with a

3   second display content to be displayed at a second time, wherein the second time is

4   after the first time;

5   a display module to alter a number of bits used to represent display data, wherein said

6   number of bits is based on the comparison performed by said content analyzer; and

7   said display port to output said display data.

1   35. The system as in Claim 34, wherein said display module further used to:

2   apply a first number of bits used to represent display data, when said content analyzer

3   determines said first display content is different from said second display content;

4   apply a second number of bits used to represent display data, when the first display content

5   is substantially the same as the second display content, wherein the second number of

6   bits used to represent display data is less than the first number of bits used to

7   represent display data.

1   36. The system as in Claim 34, wherein the number of bits used to represent data is associated with

2   a color depth of the display data.

1   37. The system as in Claim 34, wherein said display port is coupled to one of a digital to analog

2   converter, a transition minimized differential signaling transceiver, or a low voltage

3   differential signaling transceiver, for providing display data to a display device.

1   38. The system as in Claim 37, wherein said display device includes a screen of a personal digital

2   assistant.

1   39. The system as in Claim 38, wherein said display device includes a liquid crystal display.

1   40. The system as in Claim 34, further including a power module, said power module to:

2   enable a first clock rate, when said content analyzer determines the first display content is

3   different from the second display content; and

4   enable a second clock rate, when said content analyzer determines the first display content is

5   substantially the same as the second display content, wherein said second clock rate

6   is less than said first clock rate.

1   41. The system as in Claim 34, further including a power module, said power module to:

2   support a first nominal power, when said content analyzer determines the first display

3   content is different from the second display content; and

4   support a second nominal power when said content analyzer determines the first display

5   content is substantially the same as the second display content, wherein said second

6   nominal power is less than said first nominal power.